



WYMONDHAM URBAN DISTRICT

ANNUAL REPORT

for the year

1960



of the

MEDICAL OFFICER OF HEALTH

together with the

ANNUAL REPORT

of the

PUBLIC HEALTH INSPECTOR.

W.E.Holmes, M.A., M.B., Ch.B.,  
D.P.H., D.T.M. & H.,  
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THE URBAN DISTRICT OF WYMONDHAM

THE ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH  
FOR THE YEAR 1960.

Mr. Chairman, Ladies and Gentlemen,

I have the honour to present my Annual Report for the year 1960.

LOCAL HEALTH (1960)

The estimated population of Wymondham Urban District increased from 5,840 in 1959 to 5,870 in 1960. The corrected birth rate 15.4 was lower than that of England and Wales (17.1) while the corrected death rate (10.4) was also lower than that of England and Wales (11.5). The infant mortality rate was nil compared with a rate of 21.7 (a new low record), for England and Wales as a whole.

Among the communicable diseases, measles (51 notifications) and dysentery (13 notifications) were prominent; otherwise the health of the district remained generally satisfactory.

### School Immunisations.

The periodic "prick" by the school medical officer is fast becoming accepted as a routine item in the activities of the term rather than an annual black day tolerated by pupils and teachers alike.

Primary inoculations and boosters for diphtheria, poliomyelitis and tetanus together with skin tests and B.C.G. vaccinations have been established as preventive measures in schools for many years to come. Something approaching 7,000 single injections were given in the 63 schools of Area 5 last year. The inconvenience caused to teachers and their classes by this work is not inconsiderable. Our primary schools, in particular, were never intended as locales for these demonstrations of scientific achievement. It is to be hoped that when the new primary schools materialise proper provision will be made permitting pupils to face official visitors in privacy without causing complete disruption of school routine. Head teachers showed remarkable forbearance when their schools were constantly used as vaccination centres during the anti-poliomyelitis campaign.

The other problem is the attitude of the pupils towards immunisation sessions. The younger children are delightfully calm and co-operative; the "prick" is merely a punctuation mark in the chatter about holidays or presents. Tears are quite exceptional and are shed on occasions by those disappointed because they are NOT on the list. How pleasant to work with children who have learnt to be sensible about it all! Unfortunately, this bright scene unaccountably darkens when it is staged in the Secondary Modern School.

Does failure in the "eleven-plus" signify loss of confidence and self-control in all difficult situations? Why must older school-children delight in creating unnecessary apprehension in their school friends? Remembering his time in the Services does Dad tell Doreen and Dan about his "appalling experiences" when he found himself on the inoculation conveyor-belt? There must be some explanation for the reluctant arrival of these pupils in a state of quivering unwillingness; appearing, as the nurse remarked, not in the order of inclination but disinclination.

How can these children become self-confident and learn self-control? It is very hard to find an answer to this problem. The emotional relationship between the majority of parents and teenage children is so often charged with parental anxiety and a hypercritical attitude on both sides that teenage self-confidence is difficult to acquire at home; failure in the eleven-plus doesn't help the situation. Furthermore, there are still plenty of parents who instinctively over-protect their children when they could render them a far greater service by helping them to face reality with courage. It is also doubtful whether the relationship between teacher and teenage pupil can be depended upon to create self-confidence in the child.



It must now be said that there are senior schools where the self-control and good manners of the pupils are a pleasure to medical workers.

### Poliomyelitis.

The following figures show the decline in notifications of poliomyelitis in England and Wales during the past four years:

<u>Year</u>	<u>Cases</u>	<u>Deaths</u>
1957	4,481	226
1958	1,992	129
1959	1,022	91
1960	528	36 (uncorrected)

A study of the incidence of poliomyelitis in the vaccinated and the unvaccinated population (under 15 years) for the year 1959 has brought the following facts to light:

- (a) The incidence of poliomyelitis was 16.9 per 100,000 in the unvaccinated compared with 2.7 in the vaccinated.
- (b) The success of vaccine in preventing paralysis has been confirmed; the rate for paralytic polio in the unvaccinated was 12.2 while the corresponding figure for the vaccinated was 1.8.
- (c) The risk of contracting paralytic poliomyelitis diminishes with each dose of the three-dose course of vaccine.

In Area 5 the approximate vaccination rate of school children is 90%; the number of pre-school children vaccinated is as high as can be expected in any voluntary system of vaccination. On the other hand it is estimated that the vaccination rate of young adults is no more than 40%.

Details of vaccinations carried out since the vaccination scheme was introduced five years ago are shown in Table 20 in the appendix to this Report.

### Tetanus Immunisation (Area 5)

Routine tetanus immunisation of children continued throughout 1960. 1,823 primary immunisations (three injections) and 56 booster doses were given to school children.

Primary immunisations of infants were maintained at a high level. Many employees of local councils (particularly those at special risk) were included in immunisation programmes.

Particulars of all tetanus immunisations carried out during the period 1958 to 1960 are shown in Table 22 of the appendix to this Report.

Attention must again be drawn to the low position of tetanus in relation to the incidence and death rates of the more serious diseases. In the administrative county of Norfolk there were only two cases of tetanus in 1960; true to the expected fifty per cent fatality rate, one of these was fatal.

#### Influenza Vaccines.

1. Modern techniques have improved influenza vaccines and they are reasonably safe: troublesome reactions may occur in those allergic to the protein in the vaccine.
2. The protective efficiency of an influenza vaccine is about 60 per cent.
3. The duration of immunity given by vaccination is seldom more than one year.
4. The best time for vaccination for preventing winter influenza is the latter part of the preceding autumn, providing always that the vaccine contains the strain of virus implicated in the anticipated outbreak.
5. The prediction of influenza outbreaks cannot be made with certainty and there is always the possibility that new variants of the virus may make the pre-existing vaccines ineffective.
6. There is still uncertainty about the best use of influenza vaccines apart from the fact that there are persons suffering from certain diseases and disabilities whose lives might be greatly endangered by an added influenzal infection.

#### Radiography Surveys and Vaccination in the Control of Tuberculosis (Area 5)

The Mass Radiography Unit visited a number of towns and villages in Area 5 during the year. The object in visiting

villages was to determine to what extent small rural communities (hitherto omitted from surveys) contribute to the general tubercular infection rate of local populations. Results suggest that villages contribute no more and no less than the larger centres.

The response to appeals for volunteers for X-ray was very satisfactory: 3,511 chest X-rays were carried out. Three active cases of lung tuberculosis were detected and seven cases were recommended for Chest Clinic observation. Eleven inactive post-primary cases of tuberculosis were found and the recorded number of other diseases and abnormalities was fifty. Included in "other diseases" was one case of lung cancer.

The mass radiography scheme is valuable in bringing to light symptomless cases both of tuberculosis and malignant disease of the lung.

As in previous years skin testing of children aged 13+ was carried out in senior schools to detect those who had had some contact with the germ of tuberculosis during their lives. Such contact gives a naturally acquired protection. However, there is always some suspicion that a very strong reaction to the test suggests the presence of an active tubercular lesion; strong reactors are therefore advised to have a chest X-ray as a precaution.

Modern methods of treatment and prevention have produced a steady decline in the national incidence of tuberculosis; it is logical, therefore, to look forward to a similar decline in the percentage of "positive reactors" to the skin test. In 1959 the national figure for "positive reactors" amongst school children aged 13+, was 17%. In Area 5 the percentage during the past 4 years is as follows:-

1957	34%
1958	30%
1959	21%
1960	15%

Once the results of the (tuberculin) skin test are known vaccination of those children showing no result from the skin test ("negative reactors") is carried out with the consent of parents. The response of parents to the offer of this vaccination ("B.C.G") is reasonably good, but the acceptance rate (64% in 1960) is not as high as the rate for protective injections provided for school children against other diseases.

#### Food Hygiene.

Food poisoning incidents increase each year in England and Wales; in 1959 there were 7,846 recorded incidents. Certain



foods are rarely implicated in the outbreaks; other foods are frequently involved. Stringent hygienic control of potentially dangerous foods under trained supervisors (from production to special retail premises) might be a policy in the future. The vast amount of effort and legislation which has given us clean milk could cover a wider field. We have a Dangerous Drugs Act, why not a "Dangerous" Foods Act?

#### Council Housing.

Tree felling demands tree planting. The great obstacle to quick slum clearance is the need for building replacement to re-house persons displaced from unfit houses. Demolition and re-building are as inseparable as ways and means.

#### Imported Disease.

As international transport is speeded up we become more vulnerable to imported disease. Typhoid fever may not be very prevalent but no less than one third of the cases notified in this country in 1959 occurred in patients who contracted the disease while abroad. In this connection the official memorandum "Notice to Travellers" which advises on vaccination against the enteric fevers assumes a special importance.

A further aspect of imported disease is the danger of the introduction of tuberculosis (and other diseases) by immigrants reaching the shores of this country. This is a problem which is receiving attention not only from the medical profession but also from interested authorities such as the Rural District Councils' Association.

#### Old Age.

At the present time persons aged 65 years and over amount to nearly 12 per cent. of the total population of England and Wales; of these nearly half a million are house-bound through infirmity. The need for purpose-designed houses for the elderly, incorporated within housing estates, is greater than ever.



## II. STAFF

Mr. R.F. Hudson, M.P.H.I., continued duty as Public Health Inspector and Surveyor to your Council throughout the year. He was assisted by Mr. D.C. Thompson.

## III. VITAL STATISTICS

### (a) Population

The Registrar General estimates the population of Wymondham Urban District, in 1960, at 5,870 compared with 5,840 in 1959.

### (b) Births

There were 85 live births recorded during the year; 41 boys and 44 girls. The crude birth rate was 14.5 compared with 12.5 in 1959.

### (c) Deaths

Deaths numbered 67 compared with 75 in 1959; the crude death rate was, therefore, 11.4 compared with 12.8 in 1959. There were only 4 deaths of persons under 51 years of age. There were 42 deaths in the age group 60-80 and eighteen deaths in the 80-100 age group.

The principal cause of death was from diseases of the heart and circulation (41). Cancer accounted for 7 deaths; there were 3 deaths from accidents (no deaths from motor vehicle accidents) and one suicide.

### (d) Comparability Factor

The comparability factor makes an approximate allowance for the way in which the sex and age distribution of the local population differs from that of England and Wales as a whole. Allowing for this factor the adjusted birth rate for Wymondham Urban District thus becomes 15.4 compared with 17.1 for England and Wales and the death rate 10.4 compared with 11.5 for England and Wales.

### (e) Infant Mortality

The infant mortality rate for Wymondham Urban District (deaths of infants under one year per 1,000 live births) was nil, compared with a rate of 21.7 for England and Wales. The same satisfactory rate was recorded for Wymondham District in 1958.

## IV. COMMUNICABLE DISEASES

(a) Seventy-five cases of communicable diseases were notified by general practitioners during 1960. Fifty-one of these notifications were measles, thirteen

dysentery, seven scarlet fever, two cases of erysipelas, one case of food poisoning and one of paralytic poliomyelitis.

(b) Diphtheria

Occasional small outbreaks continue to occur in the more heavily populated areas of England and Wales indicating the necessity for a high immunisation rate in the community. The national immunisation rate for pre-school children is approximately 56 per cent. The immunisation rate in Area 5 compares favourably with this figure and lies between 80 and 90 per cent.

Booster doses given to school children in Area 5 in 1960 were double the average figure for previous years (1,233 inoculations); the back-log caused by the anti-poliomyelitis campaign has now been made up.

(c) Dysentery

The 13 cases notified were in families scattered throughout the town and include one case at Sutton and one at Browick. This was not so much a local outbreak as an extension of the epidemic which affected Norwich City and Norfolk County. The usual precautions regarding contacts, carriers and food-handlers were taken.

It may again be said that the spread of this disease is often related to defects in the personal hygiene practices of those who are infected and of their immediate contacts; experience has shown that hand carriage is the main factor in transmission.

(d) Scarlet Fever

Seven cases were notified. As in previous years this disease continued to appear in its mild form. Control measures against contacts are carried out particularly if food handlers are involved.

(e) Whooping cough

We have now built up a large population of immunised children with a high degree of protection consequently whooping-cough notifications have declined considerably in recent years. There were no notifications from Wymondham District in 1960. Only one case has been notified during the past three years.

(f) Poliomyelitis

One case of paralytic poliomyelitis was notified; a child, aged 5, living in the rural, lightly populated area of Silfield where she was in contact with relatively few people and had not been away from home. There were no cases in surrounding districts. She lived with her brother (school-age) and parents; no members of this family had been protected by immunisation.

Quarantine precautions included the exclusion of the few unvaccinated children from the village school which this child attended. Although desperately ill with respiratory paralysis, recovery of this patient is almost complete.

The total number of primary immunisations given to children in Area 5 from 1956 to 1960 is 8,174; in addition total booster doses are recorded at 7,180 (the child population of Area 5 is approximately 9,000).

(g) Tuberculosis

In England and Wales the fall in the number of annual deaths from tuberculosis continues. Since 1950 the death rate from respiratory tuberculosis has fallen by 79 per cent. Living conditions of notified cases are investigated; contacts of cases are offered chest X-ray examination and vaccination is given where necessary. Control measures within the community included mass radiography and B.C.G. vaccination of school leavers (13+) where a tuberculin test shows this to be advisable.

Four new cases of tuberculosis (pulmonary) were notified in Wymondham District in 1960; there were no deaths.

(h) Cancer

The number of cancer deaths in Wymondham District was 7 compared with 17 in 1959, or 10.4 per cent of the total deaths. There were no deaths from lung cancer. The national deaths from lung cancer continue to rise.

V. HOUSING

Details of action under this heading are contained in the Report of the Public Health Inspector (appended).

The policy of improving pre-war Council houses by providing modern sanitation and proper drainage was instituted during 1960.

The grouped dwellings scheme for elderly people at Standley Court Estate has now been in operation for six years; the success of this scheme as a means of providing a welfare service for the elderly was again apparent throughout the year.

At the end of the year under review live applications for Council dwellings stood at 98, compared with ninety-nine in 1959. Only two new Council dwellings were built by the Council and action was taken for the provision of nine bungalows in 1961. Eighteen private dwellings were constructed compared with twenty-four in 1959. Thirteen houses were demolished under slum clearance and one closing order was made. Five sub-standard properties were purchased by your Council.



## VI. WATER SUPPLIES

Bacteriological and chemical examination of your Council's water supplies gave satisfactory results throughout the year. However, the presence of excessive suspended iron in the raw water at the headworks has caused filtration (zeolite) difficulties.

It appears that the proportion of iron in suspension and iron in solution has altered since the original water analysis was made at the time the filters were installed.

At the close of the year Ministry approval was sought for an extension of the town's water supply to the Silfield Division of the Urban District. Seven agricultural premises, twenty private dwellings and Silfield School will benefit from the extension. Work on this scheme will begin in 1961.

## VII. SEWAGE DISPOSAL

Constructional work on a large scale at the Dereham Road sewage disposal works continued throughout the year. Extension and improvement work will provide a threefold increase in efficiency.

## PERSONAL

I wish to thank the Chairman and the Clerk of the Council, and the Chairman and members of the Public Health Committee for their continued support and kindness. I wish also to thank the Public Health Inspectors and Council staff, and the Clerical staff at the Health Office, Norwich, for the efficient and generous help they have given me throughout the year.

I have the honour to be, Mr. Chairman, Ladies and Gentlemen,

Your obedient servant,

*B. E. Holmes*

Local Health Office,  
Aspland Road,  
Norwich.

WYMONDHAM URBAN DISTRICT

Table 1. GENERAL STATISTICS

Area (in acres)	79,740
Estimated Resident Population	5,870
Rateable Value	52,731
Sum produced by a Penny Rate	210

Table 2. LIVE BIRTHS

	Males	Females	Total
Legitimate	40	42	82
Illegitimate	1	2	3
Totals	41	44	85

Live Birth Rate per 1,000 of estimated Resident Population = 14.5

Table 3. STILL BIRTHS

	Males	Females	Total
Legitimate	1	1	2
Illegitimate	-	-	-
Totals	1	1	2

Still Birth Rate per 1,000 total births = 23.0

Table 4. TOTAL BIRTHS

	Males	Females	Total
Live	41	44	85
Still	1	1	2
Totals	42	45	87

Table 5. INFANT DEATHS

(a) Infant Mortality (Deaths of Infants under 1 year)

	Males	Females	Total
Legitimate	-	-	-
Illegitimate	-	-	-
Totals	-	-	-

Infant Mortality Rates:

Total = 0.0 (per 1,000 live births)  
 Legitimate = 0.0 (per 1,000 legitimate births)  
 Illegitimate = 0.0 (per 1,000 illegitimate births)

(b) Neo-Natal Mortality (Deaths of Infants during first four weeks)

	Males	Females	Total
Legitimate	-	-	-
Illegitimate	-	-	-

Neo-Natal Mortality Rate (per 1,000 live births) = 0.0

(c) Early Neo-Natal Mortality (Deaths of infants under 1 week)

	Males	Females	Total
Legitimate	-	-	-
Illegitimate	-	-	-

Early Neo-Natal Mortality Rate (per 1,000 live births) = 0.0

(d) Perinatal Mortality (Still births and deaths under 1 week)

	Males	Females	Total
Legitimate	1	1	2
Illegitimate	-	-	-

Perinatal Mortality Rate (per 1,000 total births) = 23.0

Table 6. ILLEGITIMATE BIRTHS

Males - 1      Females - 1      Total - 2 = 2.5% of Total Live Births

Table 7. MATERNAL DEATHS (including abortion) - NIL

Maternal Mortality Rate (per 1,000 total births) = 0.0

Table 8. DEATHS (All ages)

Males	Females	Total
38	29	67

Crude Death Rate (per 1,000 of estimated Resident Population)  
= 11.4

Table 9. CAUSE OF DEATH OF INFANTS UNDER ONE YEAR - NIL



Table 10. NOTIFICATIONS OF DEATHS RECEIVED DURING THE YEAR <sup>H</sup>  
(According to Age Groups)

	Males	Females	Total
Under 1 year	-	-	-
1 and under 5	-	-	-
5 " " 10	-	-	-
10 " " 20	-	-	-
20 " " 30	-	-	-
30 " " 40	-	1	1
40 " " 50	3	-	3
50 " " 60	3	-	3
60 " " 70	14	7	21
70 " " 80	11	10	21
80 " " 90	5	7	12
90 " " 100	2	4	6
100 and over	-	-	-
Totals	38	29	67

Table 11. CAUSE OF TOTAL DEATHS (Registrar - General)

Cause	Males	Females	Total
1. Tuberculosis, respiratory.	-	-	-
2. Tuberculosis, other.	-	-	-
3. Syphilitic disease.	-	-	-
4. Diphtheria.	-	-	-
5. Whooping Cough.	-	-	-
6. Meningococcal infection.	-	-	-
7. Acute poliomyelitis.	-	-	-
8. Measles.	-	-	-
9. Other infective and parasitic diseases.	-	-	-
10. Malignant neoplasm, stomach.	-	-	-
11. Malignant neoplasm, lung, bronchus.	-	-	-
12. Malignant neoplasm, breast.	-	-	-
13. Malignant neoplasm, uterus.	-	-	-
14. Other malignant and lymphatic neoplasms.	5	2	7
15. Leukemia, Aleukemia.	-	-	-
16. Diabetes.	-	-	-
17. Vascular lesions of nervous system.	4	8	12
18. Coronary disease, angina.	6	5	11
19. Hypertension with heart disease.	3	-	3
20. Other heart diseases.	6	3	9
21. Other circulatory diseases.	1.	5	6
22. Influenza.	-	-	-
23. Pneumonia.	3	-	3
24. Bronchitis.	3	1	4
25. Other diseases of respiratory system.	1	-	1
26. Ulcer of stomach and duodenum.	1	-	1
27. Gastritis, enteritis and diarrhoea.	-	-	-
28. Nephritis and nephrosis.	-	-	-
29. Hyperplasia of prostate.	1	-	1
30. Pregnancy, childbirth and abortion.	-	-	-
31. Congenital malformations.	-	-	-
32. Other defined and ill-defined diseases.	2	3	5
33. Motor vehicle accidents.	-	-	-
34. All other accidents.	1	2	3
35. Suicide.	1	-	1
36. Homicide and operations of War.	-	-	-
Totals	38	29	67

Table 12. SUMMARY OF BIRTH AND DEATH RATES

	1954	1955	1956	1957	1958	1959	1960
<u>Live Births (per 1,000 pop)</u>	(56)	(87)	(69)	(68)	(97)	(73)	(85)
Wymondham U.D.	9.7	15.0	11.8	11.7	16.6	12.5	14.5
Area 5.	13.4	14.3	14.2	13.3	14.9	13.7	14.1
England & Wales (provisional)	15.2	15.0	15.7	16.1	16.4	16.5	17.1
<u>Still Births (per 1,000 total births)</u>	(nil)	(2)	(2)	(1)	(1)	(2)	(2)
Wymondham U.D.	0.0	22.4	28.2	14.5	10.2	26.7	23.0
Area 5.	26.0	20.8	23.7	22.0	9.9	19.9	20.7
England & Wales (provisional)	24.0	23.1	23.0	22.4	21.6	20.7	19.7
<u>Crude Deaths (per 1,000 pop)</u>	(57)	(75)	(50)	(57)	(62)	(75)	(67)
Wymondham U.D.	9.9	13.0	8.6	9.8	10.6	12.8	11.4
Area 5.	11.6	11.8	11.4	11.1	12.1	12.4	11.8
England & Wales (provisional)	11.3	11.7	11.7	11.5	11.7	11.6	11.5
<u>Infant Mortality (per 1,000 live births)</u>	(Nil)	(1)	(1)	(3)	(Nil)	(3)	(Nil)
Wymondham U.D.	0.0	11.4	14.5	44.1	0.0	41.1	0.0
Area 5.	7.1	19.0	20.8	15.0	8.3	25.4	14.1
England & Wales (provisional)	25.5	24.9	23.8	23.0	22.5	22.0	21.7

NOTE: 1. Figures in brackets are the actual numbers for Wymondham U.D.  
2. Area 5 comprises Depwade & Loddon R.Ds. and Diss & Wymondham U.Ds.

Table 13. DEATHS DUE TO CANCER - Wymondham U.D.

	1954	1955	1956	1957	1958	1959	1960
Number of deaths.	15	13	4	7	14	17	7
Percentage of total deaths.	26.3	17.3	8.0	12.3	22.6	22.6	10.4

Table 14. CANCER DEATHS DURING LAST FIVE YEARS - Wymondham U.D.

Year	Male			Female		
	Total Deaths	Total Cancer Deaths	Cancer of Lung	Total Deaths	Total Cancer Deaths	Cancer of Lung
1960	38	5	1	29	2	-
1959	45	10	3	30	7	1
1958	33	7	2	29	7	1
1957	29	4	-	28	3	1
1956	25	4	3	25	-	-
Totals	170	30	8	141	19	3



Table 15. NOTIFICATION OF INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS)  
ACCORDING TO AGE GROUPS - Wymondham U.D.

	Under 1	1 - 4 yrs.	5-14 yrs.	15-24 yrs.	Over 25	Total
Scarlet Fever	-	1	6	-	-	7
Measles	-	24	27	-	-	51
Whooping Cough	-	-	-	-	-	-
Pneumonia	-	-	-	-	-	-
Erysipelas	-	-	-	-	2	2
Dysentery (Sonne)	-	3	6	1	3	13
Food Poisoning	-	-	-	1	-	1
Poliomyelitis (paralytic)	-	-	1	-	-	1
Totals	-	28	40	2	5	75

Table 16. INCIDENCE OF INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS)  
DURING LAST FIVE YEARS - Wymondham U.D.

	1956	1957	1958	1959	1960
Scarlet Fever	2	4	9	5	7
Measles	3	141	29	13	51
Whooping Cough	-	26	-	1	-
Pneumonia	3	1	1	-	-
Erysipelas	-	2	1	1	2
Dysentery (Sonne)	31	1	-	2	13
Food Poisoning	1	3	-	6	1
Puerperal Pyrexia	-	-	-	2	-
Poliomyelitis (Paralytic)	-	1	-	-	1
Poliomyelitis (Non-paralytic)	-	-	-	-	-
Totals	40	178	40	30	75

Table 17. DETAILS OF NEW CASES OF TUBERCULOSIS FOR LAST FIVE YEARS  
Wymondham U.D.

	1956	1957	1958	1959	1960
Pulmonary					
Male	3	1	-	-	3
Female	-	1	-	1	1
Non-Pulmonary					
Male	-	-	1	-	-
Female	-	-	-	-	-
Wymondham U.D. Total	3	2	1	1	4
Area 5. Total	17	17	8	7	13





PUBLIC HEALTH INSPECTOR'S ANNUAL REPORT  
FOR THE YEAR 1960

To the Chairman and Members of the  
Wymondham Urban District Council.

Mr. Chairman, Ladies and Gentlemen,

I beg to submit my Annual Report as Public Health Inspector for the year ended 31st December, 1960.

STAFF

Your Public Health Inspector holds in addition the appointments of Highway Surveyor, Building Surveyor and Petroleum Inspector and had the services of a Student Public Health Inspector and a male clerk.

HOUSING

Slum Clearance.

During the year under review three (3) families, comprising ten (10) persons were displaced from unfit houses and rehoused by the Council.

New Orders made under the Housing Act, 1957:-

Closing Orders.

1 house, Norwich Common (Barker) 4th October, 1960.

Proceedings under the Housing Act, 1957.

Number of undertakings given by owners and accepted by the Council to carry out work to make houses fit for habitation	...	Nil
Number of Demolition Orders made	...	Nil
Number of Closing Orders made	...	1.
Number of houses made fit	...	1.
Number of houses demolished	...	13.

Proceedings under the Public Health Act, 1936.

Number of Statutory Notices served	...	1.
Number of Statutory Notices complied with (By Council in default of owner).	...	1.

Informal Proceedings under Housing and Public Health Acts.

Number of informal notices served	...	9.
Number of informal notices complied with	...	9.

New Housing Progress.

During the year 20 dwellings were completed and occupied, 2 built by the Council and 18 by private enterprise.

The position with regard to post-war housing at the 31st December, 1960, was that a grand total of 532 units of habitation had been completed and occupied, 15 temporary and 344 permanent dwellings built by the Council and 173 by private enterprise. The dwellings built by the Council are made up as follows:-

- 11. 4-Bedroom houses.
- 162. 3-Bedroom houses (including Warden's House).
- 30. 2-Bedroom flats } in Duplex houses.
- 30. 1-Bedroom flats }
- 24. 2-Bedroom flats
- 4. 1-Bedroom flats
- 49. 2-Bedroom bungalows
- 24. 1-Bedroom bungalows
- 15. 2-Bedroom temporary bungalows
- 2. 2-Bedroom flats over shops
- 8. 2-Bedroom houses.

<u>4-Bedroom Accommodation</u>	<u>3-Bedroom Accommodation</u>	<u>2-Bedroom Accommodation</u>	<u>1-Bedroom Accommodation</u>
11.	162.	128.	58.

For the information of the Council details of pre-war housing are as follows:-

<u>4-Bedroom Accommodation Houses.</u>	<u>Flats.</u>	<u>3-Bedroom Accommodation</u>	<u>2-Bedroom Accommodation</u>
4.	4.	227 *	29 ø

\* Includes Council Offices Flat.

\* Includes Manor House, Bridewell Street.

ø Includes 12 cottages - Rattle Row, Rose Cottage - Pople Street, 3 cottages - Skippers Row, Glendale and house occupied by Mr. Platten which had one bedroom converted into a bathroom.

#### Total Housing Accommodation in the District.

At the 31st March, 1961, the total number of dwellings in the Urban Area was 2,045 including those occupied in connection with a business, i.e. shops, licensed premises, and hotels, etc.

The total number of dwellings owned by the Council including sub-standard houses in temporary use was 623 which is equivalent to 30% of the total.

#### House Purchase and Housing Act, 1959

##### Grants for modernising and improving Housing Accommodation

##### (a) Modernisation of Pre-War Council Houses.

In July, 1960, the Council considered the question of modernising the 239 pre-war houses. These houses have no hot water supply, no lavatory basins and most of them no baths.

The 239 houses were erected between the years 1920 and 1940 and there are no less than ten different types of house. The average cost of modernisation was estimated to be £307. 5. 11d.

Under the House Purchase and Housing Act, 1959, the exchequer contribution payable to a local authority is a sum payable annually for a period of twenty years, beginning with the Financial year in which the works are completed, equal to three eighths of the annual loan charges referable to the amount of the estimated expenditure approved by the Minister for the purpose.

The Council resolved that the modernisation of all pre-war houses be undertaken and the work carried out in stages over a period of ten years. Plans and specification were prepared and tenders invited for the necessary work to the 12 Viny Ridge houses and at the close of the year work had been commenced.

##### (b) Privately Owned Houses.

During the year eight houses were improved or modernised with the assistance of Discretionary Grants. Work was in hand, at the close of the year,



on one where the application had been approved during the year.

Three houses were improved with the assistance of Standard Grants, and work was in hand at the 31st December on a further four.

#### Discretionary Grants

Year.	No. of Houses Modernised or Improved.	Total Amount of Grants.		
		£.	s.	d.
1952.	1.	290.	0.	0.
1953.	2.	320.	16.	11.
1954.	2.	269.	6.	4.
1955.	9.	2,421.	13.	0.
1956.	14.	2,587.	12.	4.
1957.	11.	3,101.	0.	0.
1958.	10.	2,778.	0.	0.
1959.	10.	2,549.	9.	6.
1960.	8.	2,431.	0.	0.
	67.	£16,748.	18.	1.

Average Grant per dwelling £249. 19. 8d.

#### Standard Grants

Year.	No. of Houses Modernised or Improved.	Total Amount of Grants.		
		£.	s.	d.
1959.	1.	105.	0.	0.
1960.	3.	247.	13.	2.
	4.	£352.	13.	2.

Average Grant per dwelling £88. 3. 3d.

#### Grouped Homes for Old People.

"Standley Court" Estate which comprises 19 bungalows, warden's unit and common room has continued to perform efficiently the function for which it was planned, viz:- the care and welfare of the aged within their own homes.

The table below gives an indication of the extent to which the services of the warden and her husband are called upon.

	1958.	1959.	1960.
Calls for assistance by alarm bells ...	14.	28.	18.
Doctors called ...	21.	31.	23.
General assistance ...	109.	96.	38.
General assistance on instructions of G.P.'s ...		14.	4.
Chimney Fires ...	3.	2.	2.
Use of visitors beds (number of nights)	30.	17.	30.
Deaths ...	4.	1.	2.
Marriages ...	-	1.	-

#### Private Development.

The total number of units of habitation provided by private enterprise during the year was eighteen.

The last of the 15 bungalows at Orchard Way was completed during the year by private enterprise and at the close of the year the Council was actively pursuing the possibility of purchasing further land for development and resale for private building.

### Demand for New Houses.

The register of applications for Council houses from persons residing or working within the Urban District shewed 98 live applications as at the 31st December, 1960. The details of these applications are set out below along with the figures for the previous three years.

	<u>1957.</u>	<u>1958.</u>	<u>1959.</u>	<u>1960.</u>
Childless families.	30.	16.	23.	12.
Families with 1 child.	27.	22.	30.	29.
Families with 2 or more children.	22.	13.	21.	28.
Old people requiring bungalows.	43.	31.	25.	29.
Totals.	122.	82.	99.	98.

### Overcrowding.

	<u>Housing Act Standard.</u>	<u>Bedroom Standard.</u>
Cases remaining on register 31.12.59.	3.	9.
Cases reported 1.1.60 - 31.12.60.	Nil.	2.
Cases abated 1.1.60 - 31.12.60.		
(a) by action of Local Authority.	Nil.	2.
(b) otherwise.	Nil.	3.
Total remaining at 31.12.60.	3.	6.

### WATER

#### Town Supply

The statutory supply area of the Urban Council's water undertaking is the whole of the Urban District and approximately 950 acres within the Rural District of Forchae & Henstead. In addition about 16,789,980 gallons of water is supplied in bulk annually to the latter Rural District.

The total mileage of mains under the control of the Council is 23 miles.

The pumping station is situated at Wicklewood in the Rural District of Forchae & Henstead. The headworks comprise five 12" boreholes approximately 300 ft. in depth. Each borehole is capable of yielding 10,000 gallons per hour. The normal average rest level is 73'7" and the pumping level (at 8,000 g.p.h.) 93'6". The concrete reservoir has a capacity of 240,000 gallons, the top water-level being 226 ft. above ordnance datum. The water is softened, aerated and chlorinated. The capacity of the "Permutit" Base Exchange Softening Plant per regeneration was designed for 101,800 gallons of raw water with a hardness of 26.2° to be reduced to zero and giving an output of 139,000 gallons of blended water with a residual hardness of 7°. The Council decided to increase the residual hardness of the water in order to conserve salt supplies and the hardness figure is now 9°. Chlorination of the water supply is by an automatic gas type instrument in phase with the pumps.

During the year the average daily output of the pumping station was 302,930 gallons rising during peak demand periods to a maximum of 397,843 gallons.

#### Softening Plant.

The Permutit Co. Ltd. was called in to investigate the falling off of the efficiency of the softening plant, which was mentioned in the last Annual



Report. Laboratory tests carried out on samples of the softening material shewed a heavy contamination of precipitated iron, although the bead quality of the samples was very good with only a small percentage cracked or broken. The Company was therefore of the opinion that the recent decline in output from the plant was due to iron contamination and in order to restore its capacity to a reasonable level it would be necessary to apply an acid-wash with an inhibitor, a process which in fact might in future have to be carried out at intervals of 2 to 3 years. The work recommended was carried out on the 2nd and 3rd of May at a cost of £62. 15. Od. (chemicals £40. 5. Od. : Permutit Engineers time and expenses £22. 10. Od.) The average output per regeneration of zero softened water for the three months immediately prior to the acid-wash was 92,790 gallons; the average immediately after the acid-wash was 119,962 gallons per regeneration. In September the Council was informed that from the 5th June to the 3rd September the average output had been 115,638 gallons per regeneration. It was also reported that since the acid-washing of the zeolite bed a small quantity of this material had been escaping both to the aerator on the reservoir and to the waste water chamber. The facts had been immediately reported to the Company, whose Engineer confirmed the presence of zeolite in both the downward and upward flow; he also found an unevenness of the supporting silex underbed. The Company was of the opinion that the loss of zeolite was not sufficient to justify remedial action, which would necessitate the complete emptying of the plant to enable it to be repacked. They recommended a careful check being maintained to determine any appreciable increase in the loss of zeolite.

On the 18th October the Company was informed that the material in the softener had fallen by approximately one inch and that the surface level remained uneven.

No action was taken, however, as by this time the plant again shewed a marked falling off of efficiency. A technical representative of the Company visited the works on 22nd November to investigate further the iron contamination trouble as it was considered better to deal with this problem before incurring the expense of recharging the softening plant.

Two samples of water were taken from each of the five sources of supply and submitted to the Company and at the end of the year a report from the Consulting Engineers and the Company was awaited.

#### Pumps.

No. 1 pump was withdrawn from the borehole in June. This was returned to the makers for overhaul and subsequently replaced.

#### Lead Content.

Early in the year the following letter was received from the Public Health Engineer to the Ministry of Works:-

##### Wymondham Post Office.

"A recent analysis has revealed a considerable lead contamination  
"in the drinking water obtained from a tap in these premises: the lead  
"content was 0.2 parts per million which is regarded as excessive.

"Probably you are aware of some degree of plumbo-solvency in your  
"water supply and propose remedial measures. Your observations will  
"be appreciated."

It was found that the water in the Post Office passed through a lead service pipe 57 ft. in length and on the advice of the Public Analyst two samples were taken from a tap in the Post Office, one at 5 a.m. (after the water had stood overnight in the service pipe), and the second at 11.15 a.m. (after an appreciable drawoff). The result of analyses was:-

Sample taken at 5 a.m.	Lead = 0.07 parts per million
" " 11.15 a.m.	Lead = 0.01 " " "



The Public Analyst's remarks were as follows:-

"There is no official standard for the lead content of drinking water in this country. The American Public Health Association recommended that drinking water should contain not more than 0.1 p.p.m. of lead. Even if this be accepted as reasonable, it is applicable to water drawn in the normal way, and should not be applied to samples taken first thing in the morning, so that the water has been in contact with the service pipe all night. Under these special conditions it is reasonable to tolerate a higher lead content.

"Bearing these considerations in mind, in my opinion the above figures are satisfactory and do not indicate that any action is called for. I would emphasise, however, that where water has been in contact with a lead service pipe, the amount of lead dissolved by the water may vary quite considerably from day to day according to the length of time the water has stood in the pipe, the prevailing temperature, and even whether the tap is turned on full or allowed to trickle slightly. Before reaching any conclusions about the plumbo-solvency of the Wymondham Town supply, it would be desirable to accumulate further information by taking more samples. These could either be from the same sampling points as previously, or perhaps more profitably, further pairs of samples might be drawn from other houses in the area where there is a lead service pipe."

A further pair of samples were taken from a Council house, having a lead service pipe. The certificate of analysis was as follows:-

6.54 p.m.	5.4.60.	Lead = less than 0.01 parts per million
7.00 a.m.	6.4.60.	Lead = less than 0.03 parts per million

Remarks by Public Analyst:- "The above figures are satisfactory and in our opinion do not indicate any significant degree of plumbo-solvency in this water."

No further action was taken.

#### Extension of Mains.

At the close of the year the Council had instructed its Engineers to prepare the necessary technical details for the extension of mains in the Silfield locality.

#### Sampling.

A total of 17 samples of water were taken for bacteriological examination and in each case the result was satisfactory.

Details of a full chemical analysis is given on Folio 12.

#### Sewerage & Sewage Disposal.

The system of sewerage in the town is a partially separate system. It was originally intended that it would be a separate system but a considerable amount of storm water now finds its way into the foul sewers.

The sewage disposal works are situated on the Dereham Road near the railway (Wymondham/Dereham line). The works were constructed in 1933 to deal with an average dry weather flow of 72,000 gallons per day. The present dry weather flow is now approximately 220,000 gallons per day.

Tenders for the work of extending and improving the sewage works were considered by the Council in March 1960, and the successful contractors commenced work in August. Excessive rainfall made conditions extremely bad at the sewage works and the contractors worked under a severe handicap for several months. On one occasion the whole of the works, including new excavations were under water. At the end of the year the position was as follows:-

5 new sludge beds, nearing completion;  
 concrete floor and first lift to concrete walls complete;  
 three of the four filters excavated, floors complete and brick  
 walls equivalent to  $1\frac{1}{2}$  filters complete;  
 floor and main walls of humus tank complete;  
 work of laying humus sludge drains complete;

The composting of sludge with straw was continued during the year and this was carried on to the fields of the adjoining farmer supplying the straw.

There were no serious stoppages in the sewerage system during the year.

The small sewage disposal plant at Spooner Row functioned satisfactorily during the year.

Your Council has no scheme in operation for the emptying of cesspools in the District. Arrangements are made with the adjoining Rural District Council to empty cesspools when necessary; the owners of properties concerned paying the Rural District Council direct for the service.

#### Refuse Collection & Disposal.

The collection of household refuse is carried out by direct labour. One motor vehicle, a 12 cubic yard "Karrier" continued to give good service.

There is a weekly collection of household refuse in the town scavenging area and a monthly collection of tins and bottles only in two rural localities of the district.

The town scavenging area is as follows:-

Norwich Road - as far as the "Old Oak" Public House;  
 Browick Road - as far as the Council Houses;  
 Silfield Road - as far as Coll's Farm;  
 London Road - including the two cottages near Longfield's house;  
 Cavick Road - as far as Johnson's Farm; and  
 To the north of the Town, Tuttles Lane is roughly the limit of collection.

The approximate number of dustbins dealt with by the Collectors is:-

Town scavenging area.	Weekly Collection	1687	bins.
Spooner Row/Suton.	Monthly Collection	140	bins.
Silfield/Browick.	Monthly Collection	91	bins.

Pail closets within the Town scavenging area are emptied by the refuse collectors. As a result of slum clearance and conversion the number of pail closets within the scavenging area has been reduced from 77 to 71.

Trade and domestic refuse is disposed of at the Council's Strayground Lane tip. Controlled tipping is carried out as and when suitable and sufficient covering material is available. There were no complaints during the year.

#### Inspection and Supervision of Food.

Regular visits of inspection have been made to food premises of all types and during the year under review 84 visits of inspection were made.

#### Number of food premises in the Urban District.

Butchers shops	..	..	..	..	..	7.
Grocers shops	..	..	..	..	..	24.
Catering Establishments	..	..	..	..	..	9.
Fishmongers shops	..	..	..	..	..	4.
Greengrocers shops	..	..	..	..	..	6.
Licensed premises	..	..	..	..	..	17.
Bakehouses	..	..	..	..	..	2.



Premises registered under Section 16 of the Food & Drugs Act, 1955.

Manufacture of sausages, etc.	..	..	..	8.
Manufacture of ice-cream	..	..	..	Nil.
Sale of ice-cream	..	..	..	23.

Milk and Dairies Regulations.

The following licences were issued by the Council during the year:-

	<u>No. of</u> <u>Licences.</u>
Dealers licensed to sell Pasteurised Milk..	2.
" " to sell Tuberculin Tested Milk ..	3.
Supplementary licences to retail Pasteurised Milk within the U.D.	4.
Supplementary licences to retail Tuberculin Tested Milk within the U.D.	5.

The Council agreed to co-operate with the Norfolk County Council by displaying posters in connection with the Norfolk "Clean Milk Bottle Campaign."

Ice-Cream (Heat Treatment, etc.) Regulations, 1947-1952.

There are no premises registered in the district for the manufacture of ice-cream.

As mentioned earlier 23 premises are registered for the sale of ice-cream. Six samples were taken for bacteriological examination. The Methylene Blue test was satisfied in each case and the ice-creams were placed in Grade 1.

Food & Drugs Act.

Food Hygiene Regulations.

The following work was carried out as a result of informal action during the year:-

Grocers shop	-	shop and store room decorated and wash basin with hot and cold water provided.
Grocers shop	-	repairs to wall plaster in store room and decoration. Trapped waste provided to sink.
Butchers shop	-	inefficient water heater - new one provided.
Cafe	-	kitchen rearranged and decorated - new ladies and gents conveniences provided.
Cafe	-	Decoration and general improvement.

Foods Condemned.

35lbs. Beef.  
4 $\frac{1}{2}$ lbs. Beef.  
5 $\frac{1}{2}$ lbs. Lamb.  
1 $\frac{1}{2}$ lbs. Cooked Beef and Tongue.  
2lb. tin Luncheon Meat.  
6lb. tin Corned Beef.  
 $\frac{1}{2}$ lb. tin Corned Beef.  
2-4lb. tins Chopped Pork.  
1lb. Pork Pie.

The Slaughterhouse Act, 1958.

Under Section 3(1) of the Act the Council was required to review and, after consultation with such organisations as appear to the authority to represent the interests concerned, to report to the Minister on:-



- (a) the existing and probable future requirements of their district for slaughterhouse facilities having regard to the needs both of persons requiring the use of such facilities and of other persons; and
- (b) the slaughterhouse facilities which are or are likely to become available to meet those requirements.

This report had to be submitted to the Minister by not later than 2nd November, 1960.

The Council appointed a Sub-Committee to prepare the report, which was submitted to the Council in September for approval, and afterwards submitted to the Minister.

There had been no slaughtering in Wymondham since 1954 and the Council was satisfied that the Urban District was adequately served by modern abattoirs and slaughterhouses already erected or brought up to standard in surrounding districts.

The report consisted of a statement to the effect that there were no existing slaughterhouses in use and no demand for slaughtering facilities and set out details of consultations the Council had had to confirm the position.

A communication was subsequently received from the Ministry of Agriculture Fisheries & Food stating that the Minister had accepted the report as submitted.

#### Licensed Premises.

The following work was carried out to public houses during the year after service of informal notices:-

Hot water and washing facilities in the bars of two public houses.

#### Clean Air Act.

The only action taken under the above Act during the year was an informal approach to the owners of an asphalt plant in connection with complaints of a nuisance from dust. Remedial measures were taken and conditions have improved.

#### The Agriculture (Safety, Health & Welfare Provisions) Act, 1956.

After informal action suitable conveniences were provided in two instances where male and female labour was employed.

#### Factories.

The following table gives details of the number of factories in the district together with notices served to remedy defects found in the course of inspections of the various premises.

Premises	Number on Register	Number of		
		Inspections	Written Notices	Occupiers prosecuted
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities.....	6.	4.	-	-
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority.....	48.	74.	2.	-
(iii) Other Premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	19.	114.	3.	-
Total.....	73.	192.	5.	-

Particulars	Number of cases in which defects were found				Number of cases in which prosecutions were instituted
	Found	Remedied	To H.M. Inspector	By H.M. Inspector.	
Want of cleanliness (S.1)	-	-	-	-	-
Overcrowding (S.2).....	-	-	-	-	-
Unreasonable temperature (S.3).....	-	-	-	-	-
Inadequate ventilation (S.4).....	-	-	-	-	-
Ineffective drainage of floors (S.6).....	-	-	-	-	-
Sanitary Conveniences (S.7)					
(a) Insufficient.....	4.	4.	-	-	-
(b) Unsuitable or defective.....	1.	1.	-	-	-
(c) Not separate for sexes.....	-	-	-	-	-
Other offences against the Act (not including offences relating to Outwork).....	-	-	-	-	-
Total.....	5.	5.	-	-	-

The number of outworkers as per the August Lists was one, engaged on Brush Making.

#### Rodent Control.

The position with regard to rodent control remained the same as last year.

One of the Council's employees, a trained rodent operative, continued to give part-time to this service.

Set out below is a copy of the report made to the Ministry of Agriculture, Fisheries and Food on the performance of the Council's functions under the provisions of the Prevention of Damage by Pests Act, 1949.

	Type of Property				Agricult- -ural
	N o n - a g r i c u l t u r a l				
	L.A.	Dwelling- House	Busine s.	Total of Cols.(1) (2) & (3).	
1. Number of properties in L.A's District.	8.	1891.	299.	2198	70.
2. Numbe of properties inspected as a result of:-  (a) Notification. (b) Survey under the Act (c) Otherwise.	1. 6. 1.	54. 852. 625.	12. 3. 81.	67. 861. 707.	- - 9.
3. Number of properties inspected under (2) which were found to be infested by:-  (a) Rats {Major Minor (b) Mice {Major Minor	3. 5. - -	29. 266. 1. 6.	6. 9. - -	38. 280. 1. 6.	- - - -
4. Number of infested properties under (4) treated by the L.A.	8.	362.	15.	325.	-
5. Number of "Block" control schemes carried out.					

19.

I have the honour to be  
Your obedient Servant,

R.F.Hudson,  
M.A.P.H.I.



Summary of Water Officer's Weekly Reports for the year ended 31st December, 1960.

Total gallons pumped during year ... 114,159,400

Zero Softened Water ... 65,335,000

Water pumped for processing purposes:

Blended water ... 45,537,400

Rinsing water )  
Washing water ) ... 3,287,000  
Prolonged wash )

Salt consumed during the year: 259 tons. 11 cwt.

Consumption:

Parish of Hingham ... 16,789,980  
Wymondham, Norley, Spooner Row and Sutton... 94,082,420  
Average daily consumption of Hingham ... 45,874  
Average daily consumption of Wymondham, &c. 257,056

CERTIFICATE OF ANALYSIS OF WATER.

Sample received from the Wymondham Urban District Council. 28th December, 1960.

Marked: Wymondham Public Supply.

Appearance when received: Slightly opalescent.

Nature of Deposit: Nil.

Colour: Faint Yellow. Odour: Nil.

Reaction: Faintly acid pH 6.6. Taste: Satisfactory.

RESULTS OF CHEMICAL ANALYSIS IN PARTS PER MILLION.

Ammoniacal nitrogen	0.04	Hardness as $\text{CaCO}_3$ :	
Albuminoid nitrogen	0.02	Total:	365
Nitrate nitrogen	2.0	Carbonate (temporary)	325
Nitrite nitrogen	Nil	Non-carbonate (permanent)	40
Chlorine as chlorides	22	Alkalinity as $\text{CaCO}_3$	325
Oxygen absorbed (4 hr. $27^\circ\text{C}.$ )	0.3	Free carbon dioxide	67
Sulphate as $\text{SO}_4$	40	Total solids (at $180^\circ\text{C}$ )	435
Silica as $\text{SiO}_2$	14	Iron (total)	0.75
Fluorine as F	Nil	Metals in solution (other than iron)	nil
Calcium as Ca	130		
Magnesium as Mg	8	Carbonate as $\text{CO}_3$	195
Sodium as Na	25	Nitrate as $\text{NO}_3$	8

OPINION

This water is of very good organic quality and the chemical analysis does not suggest that any pollution is occurring. The total hardness of the water is approximately  $26^\circ$  Clark, all but  $3^\circ$  of which is temporary. A trace of iron is present, giving rise to a slight deposit on standing and colouring the water faintly yellow. The reaction of the sample as received was just on the acid side of neutrality.

There is little alteration in the mineral analysis since this water was last analysed (our certificate No. 386L, dated 29th January 1960). In our opinion, if the iron is removed from this water by suitable treatment, it should then be very suitable for use as a public supply.



